

ABSTRACT

The invention concerns a turbine comprising: a rotary mobile part called rotor (1) consisting of a set of blades (2) variable in number, the assembly rotating about a horizontal axis (6), one or more stationary parts (4), acting as barrier for retaining the water level; a water intake channel (15) and a water discharge channel (16). The invention is characterized in that the shape of the cylindrical ring of the mobile part (1), which enables, in the volume left free by its movement, provision of the water retaining element (4) wherein are installed the mechanical elements constituting the speed-increasing and brake units. Such a design enables kinetic energy and water-level potential energy to be used in the intake channel (15). Said water wheel is designed for use of water energy of rivers and tides to transform mechanical energy which may or may not be transformed into electricity.